

Work Order ID 62279

September 24, 2010 1:56:49 PM

Page 1



Item ID: D206-642-541

Accept



Setup Start



Revision ID:

Item Name: Replacement Skidtube

Stop



Start Date: 9/24/10 Start Qty: 1.00



Cust Item ID:

Required Date: 10/08/10 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: CL

Date: 10/9/24

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3274	D								
IIN-D206-642	Rev M								

100

0.00



DOCUMENT CONTROL

DC

Document Control

Memo

0.00

Photocopy bluefile & type labels per PPP D206-642-541

CHG003

N/A CL 10/12/13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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NOTE: Date & initial all entries

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Run Start
Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110 	Skidtubes	0.00							
Skidtubes	Memo	0.00							
Skidtubes	****VERIFY AND INSPECT THE MATERIAL PRIOR TO USE****								

1- Bend FWD end of tube using bend prog D3274 FWD and foilo 10 as per dwg D3274, cut fwd end of tube with saw table setup D3274.

2- remove fwd indexing ridge as per dwg D3274. Prepare for welding

3- weld fwd cap as per dwg D3274 and OSI004

AR Aluminum Rod Batch: M112507

BE 10-10-4

4- grind fwd cap weld on top surface only

5- Cut AFT end of tube at 170.9" as per dwg D3274 and deburr end.

6-Drill Aft cap pilot hole using DT8025

7 -Cleco DT8025 in position and install pilot hole drill Jig DT8742A,B,C,D.
Drill 3/16" pilot holes as per Dwg D3274

8 -Remove inner indexing ridge on aft end of skidtube as per Dwg D3274 scribe batch #

9 -Open aft end cap holes to Ø0.208" as per Dwg D3274. Deburr aft end.

DP 10-10-4

BE 10-10-4

BE 10-10-5

BE 10-10-5

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Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120



Chemical Conversion Coat per QSI005 4.1

0.00

6 - BB10/10/05

HandFinish

Memo

0.00

Hand Finishing

130



QC3- Inspect Part Finish

0.00

S 10/10/05

QC

Memo

0.00

Quality Control

140



QCS- Inspect part completeness to step on W/O

0.00

S 10/10/05

QC

Memo

0.00

Quality Control

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Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



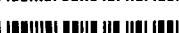
QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150



Skidtubcs

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

170



Skidtubes

Skidtubes

0.00

Skidtubes

Memo

0.00

1-Bend AFT end of tube using bend prog. D3274 AFT as per dwg D3274. Install drop pins in crossbolt spacer holes to maintain web position.

2- DRILL PILOT HOLES FOR WEARPLATES USING D3274-1T2
OPEN HOLES TO .297". Deburr3-DRILL TOE PIN HOLE .640" DIA AS PER DWG USING DT8935 FWD
END OF TUBE
DEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES)
REMOVE ANY FOREIGN OBJECTS INSIDE OF TUBES

4- Countersink crossbolt spacer holes as per Dwg D3274

5- prepare for welding

180



QC

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

8/10/08

L° = 4.6°
h = 3.0"

10-11-8

DP

10-11-8

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Customer:

Reference:

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Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190



Skidtubes

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Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

210



QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

8/10/11

220



HandFinish

Hand Finishing

Pressure Wash per QSI005 4.3

0.00

8/10/11

Memo

0.00

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch

230



Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

M115291

0.00

START TIME: 11:35

OVEN TEMPERATURE: 320°

FINISH TIME: 12:05

1 BL 10-11-15

W/O:		WORK ORDER CHANGES					
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Tool #
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Code**
**Accept
Qty**
**Reject
Qty**
**Reject
Number**
**Insp.
Stamp**

240



QC

Quality Control

QC3- Inspect Part Finish

0.00

24/10/16

V

d

250



HandFinish

Hand Finishing

HandFinishing

0.00

24/10/16

1

S

Memo
1-Install Nut Plate as per Dwg D3274. Apply LPS-3 to Nut Plate and rivets.
A/R□N/A□LPS-3□ M109956

2-Install inserts as per Dwg D3274. Use a drop of Sikaflex inside insert holes a
A/R□□Sikaflex-291 □ 11/11/14
Sikaflex expire date: □ 11/10

260



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

24/10/16

Memo
Inspect Nut Plate & Inserts

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Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

270



HandFinish

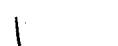
Hand Finishing

HAND FINISHING RESOURCE #1

0.00

= 40

10/11/16



Memo

0.00

✓ 1-Install wearpads & gaskets as per Dwg D3274.

✓ 2-Install ring as per Dwg D3274
A/R Sikaflex-291 M11S1140
Sikaflex expire date: 11/01

✓ 3-Inspect for foreign objects as per QSI 024

✓ 4-Spray inside of tube on both sides of web with LPS-3
A/R LPS-3 Batch: N/A✓ 5-Install Aft Cap and seal with Sikaflex. Clean excess adhesive.
A/R Sikaflex-291 M11S1140
Sikaflex expire date: 11/01

280



QC

QC5- Inspect part completeness to step on W/O

0.00

S. Schulz



Memo

0.00

Quality Control

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Item ID: D206-642-541

Accept



Setup Start



Revision ID:

Item Name: Replacement Skidtube

Stop



Start Date: 9/24/10 Start Qty: 1.00



Cust Item ID:

Required Date: 10/08/10 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

290

Identify as per dwg & Stock Location: _____

0.00



Packaging

Memo

PMA 63382

0.00

300

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

*NOTE: Date & initial all entries

Picklist Print

Page 2

September 24, 2010 1:56:49 PM

Work Order ID: 62279



8

Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 9/24/10

Required Date: 10/08/10

Start Qty: 1.00

Required Qty: 1.00

D2649 Manufactured No 190 Each 107.0000 1 1



Cross Bolt Spacer

Location	Loc Qty	Loc Code
LG	107	
58545	2	
60652	4	
61496	101	

B63359 12 BE 10/11/09

D3275-1 Manufactured No 190 Each 184.0000 12 12



Crossbolt Spacer

Location	Loc Qty	Loc Code
LG	184	
53453	8	
60653	3	
61646	173	

12 BE 10/11/09

CR3212-4-03 Purchased No 250 Each 1,898.0000 2



Cherry Rivet

Location	Loc Qty	Loc Code
ST311	1898	
111359	5	
112314	2	
114436	448	
114450	77	
114859	1366	

10/11/16

D3415-041 Manufactured No 250 Each 55.0000 1



Nut Plate

Location	Loc Qty	Loc Code
ST056	55	
33842	55	

10/11/16

y1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 3

September 24, 2010 1:56:49 PM

Work Order ID: 62279

✓
4

Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 9/24/10

Required Date: 10/08/10

Start Qty: 1.00

Required Qty: 1.00

CCR264SS3-3

Purchased

No

250

Each

456.0000

2

2



M1 1011116

Cherry Rivet



<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST311	456	
112314	4	
113539	44	
113973	408	XZ

ALS4-1032-130

Purchased

No

250

Each

2,044.000

78

78



M1 1011116

Insert



<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
PKG11	1995	M115911
114723	1995	X-78
ST282	10	
110511	10	
ST381	39	
114654	39	

D3536-15

Manufactured

No

270

Each

17.0000

1

1



M1 1014116

Gasket



<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP	16	
56055	4	
60875	12	B62459
FP11	1	X1
59238	1	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

September 24, 2010 1:56:49 PM

Page 4

Work Order ID: 62279



Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 9/24/10

Required Date: 10/08/10

Start Qty: 1.00

Required Qty: 1.00

D3536-23

Manufactured No

270

Each

15.0000

1

1

Gasket



HL 10/11/16

Location

Loc Qty

Loc Code

FP011

15

B63 238

60234

4

y1

61237

11

D3536-35

Manufactured No

270

Each

16.0000

1

1

Gasket



HL 10/11/16

Location

Loc Qty

Loc Code

FP012

16

B62 442

58683

1

60235

3

61692

12

D3536-39

Manufactured No

270

Each

15.0000

1

1

Gasket



HL 10/11/16

Location

Loc Qty

Loc Code

FP12

15

58215

1

58571

14

VL

D3535-15

Manufactured No

270

Each

13.0000

1

1

Wearshoe



HL 10/11/16

Location

Loc Qty

Loc Code

FP18

13

B62 707

61241

13

X1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 5

September 24, 2010 1:56:49 PM

Work Order ID: 62279



Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 9/24/10

Required Date: 10/08/10

Start Qty: 1.00

Required Qty: 1.00

D3535-35

Manufactured

No

270

Each

13.0000

1

1



Wearshoe

Ml 1011116

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP018	13	BL62461
60865	13	

D3535-39

Manufactured

No

270

Each

19.0000

1

1



Wearshoe

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP18	19	
58214	2	
60233	17	

D3535-23

Manufactured

No

270

Each

25.0000

1

1



Wearshoe

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP	12	
61830	12	BL62706
FP021	23	
60231	11	
FP21	2	
60864	2	

D3537-3

Manufactured

No

270

Each

18.0000

1

1



Wearpad

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP17	17	BL61674
60866	17	
FP19	1	
59711	1	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 6

September 24, 2010 1:56:49 PM

Work Order ID: 62279



Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 9/24/10

Required Date: 10/08/10

Start Qty: 1.00

Required Qty: 1.00

D3537-1

Manufactured

No

270

Each

87.0000

9

9



M1101116

Wearpad

	<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>	
	FP	1	B63313	X9
	55465	1		
	FP17	86		
	57713	3		
	60491	3		
	61640	80		

AN960C10L

NAS1149C0332

Purchased

No

270

Each

29.0000

80

80



X80 M1101116

washer

	<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>	
	ST245	29		
	107534	29		

AN960C416

NAS1149C0463

Purchased

No

270

Each

103.0000

1

1



X1 M1101116

washer

	<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>	
	ST346	103		
	100993	103		

D3672-1

Manufactured

No

270

Each

869.0000

2

2



M1101116

Phenolic Washer

	<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>	
	ST077	869		
	42329	150		
	52505	719		X2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 7

September 24, 2010 1:56:49 PM

Work Order ID: 62279



4

Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 9/24/10

Required Date: 10/08/10

Start Qty: 1.00

Required Qty: 1.00

AN3C4A

Purchased

No

270

Each

2,108.000

80

80



HL 101UL16

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST245	38	
109061	11	
110139	27	
ST303	42	
115438	42	
ST350	2028	
114108	14	
114416	12	
114523	2	
115300	1000	
<u>115589</u>	1000	x80

AN4C5A

Purchased

No

270

Each

495.0000

1



HL 101UL16

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST346	495	
110552	7	
<u>112243</u>	488	X1

D2646

Manufactured

No

270

Each

60.0000

1



HL 101UL16

Aft Cap

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP-4	51	
<u>57332</u>	51	X1
fp5	4	
61752	4	
FP6	5	
52663	5	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 8

September 24, 2010 1:56:49 PM

Work Order ID: 62279



8

Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 9/24/10

Required Date: 10/08/10

Start Qty: 1.00

Required Qty: 1.00

D3413-1

Manufactured No

270

Each

36.0000

1

1



Ring



10/16/10

<u>Location</u>	<u>Loc Oty</u>	<u>Loc Code</u>
ST473	36	
51586	1	
53446	15	
<u>61322</u>	20	X \

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN CP	DRAWN BY PH	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED #	APPROVED #	DRAWING NO. D3274	REV. D SHEET 1 OF 4
DATE 06.12.19		TITLE SKIDTUBE ASSEMBLY	SCALE NTS
A	04.03.15	NEW ISSUE	
B	04.08.09	MOVE SADDLE HOLE: 42.14 WAS 42.76	
C	05.03.16	ADD -043; NEW INSERTS	
D	06.12.19	NEW INSERTS, SS WEARSHOE + GASKET	

RELEASED07.02.12 **#****DEO ATTACHED**

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO 62279
CX1019124

Qty -041	Qty -043	Part Number	Description
X		D3274-041	SKIDTUBE ASSEMBLY
	X	D3274-043	SKIDTUBE ASSEMBLY
1	1	D2600-1-240	EXTRUSION
1	1	D2646	AFT CAP
12	12	D2649	CROSS BOLT SPACER
12	37	D3275-1	CROSS BOLT SPACER
1	1	D3282-041	FLOAT WEB
1	1	D3285-1	CAP
1	1	D3413-1	RING
1	1	D3415-041	NUT PLATE
1	1	D3535-15	WEARSHOE
1	1	D3535-23	WEARSHOE
1	1	D3535-35	WEARSHOE
1	1	D3535-39	WEARSHOE
1	1	D3536-15	GASKET
1	1	D3536-23	GASKET
1	1	D3536-35	GASKET
1	1	D3536-39	GASKET
9	9	D3537-1	WEARPAD
1	1	D3537-3	WEARPAD
78	78	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
80	80	AN3C4A	BOLT
1	1	AN4C5A	BOLT
1	1	AN960C416	WASHER
80	80	AN960C10L	WASHER
2	2	CCR264SS3-3	RIVET
2	2	CR3212-4-03	RIVET
2	2	NAS1515H3L	WASHER

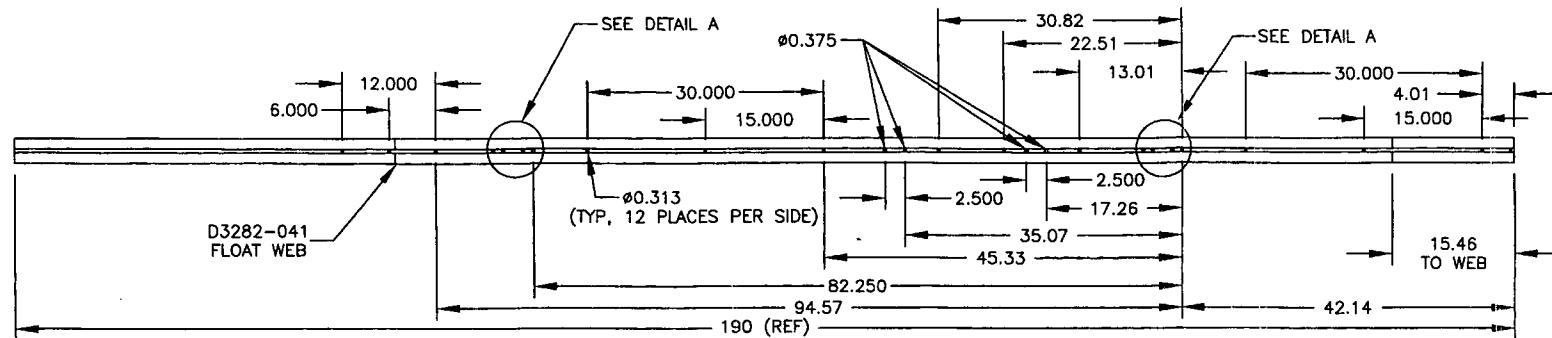
GENERAL NOTES:

1. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
2. DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 7 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
3. ALL HOLES DRILLED ON CENTERLINES.
4. BOND D3282-041 FLOAT WEB INTO D3274-1/3 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
5. WELDING TO BE DONE PER DART QSI 004.
6. FINISH: - ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1
- POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
7. DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3274-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241-291.
8. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

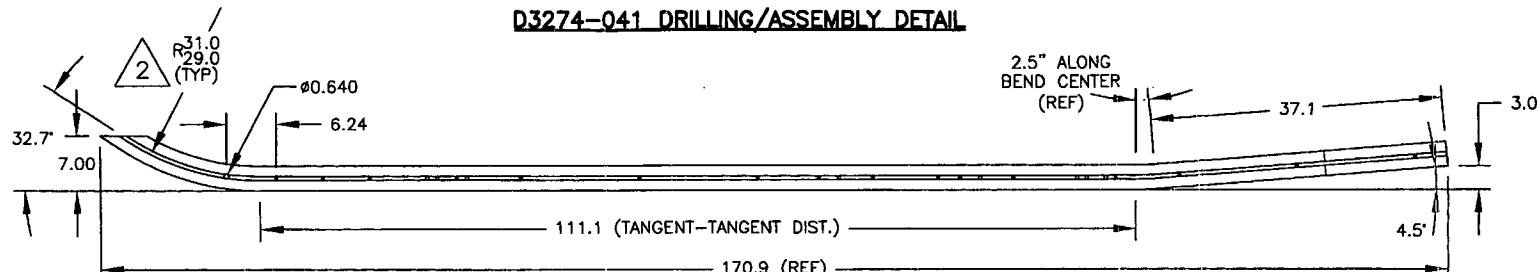
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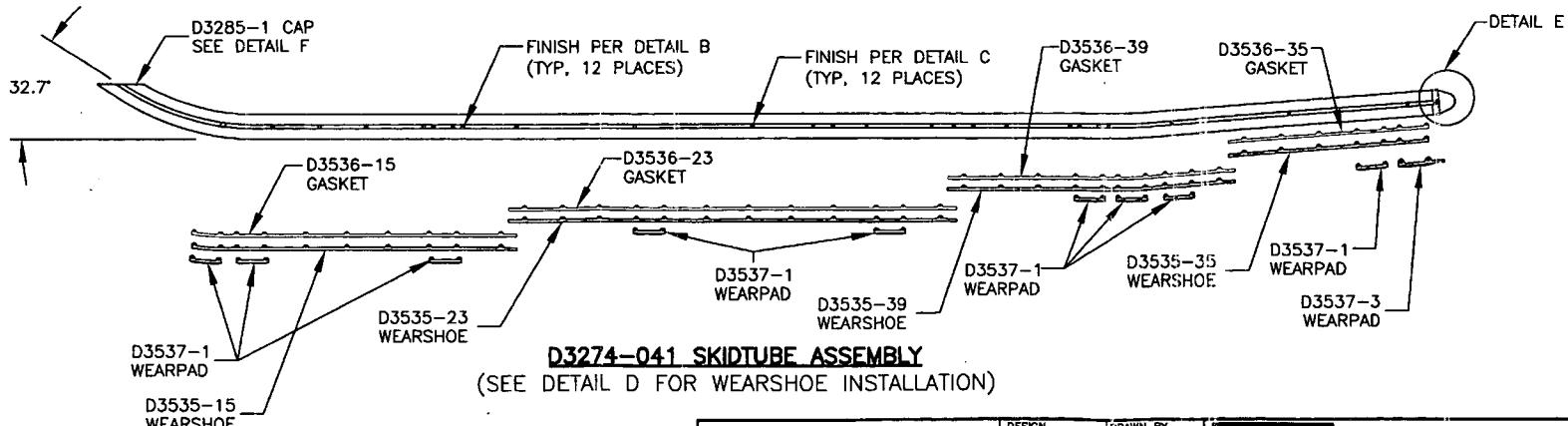
DEO ATTACHED



D3274-041 DRILLING/ASSEMBLY DETAIL



D3274-041 BEND/DRILLING DETAIL



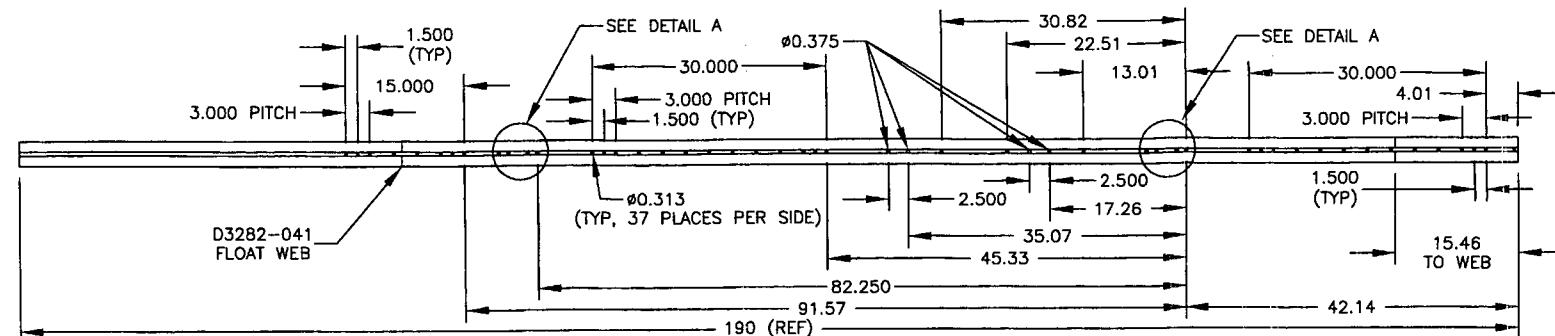
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07.02.12 #

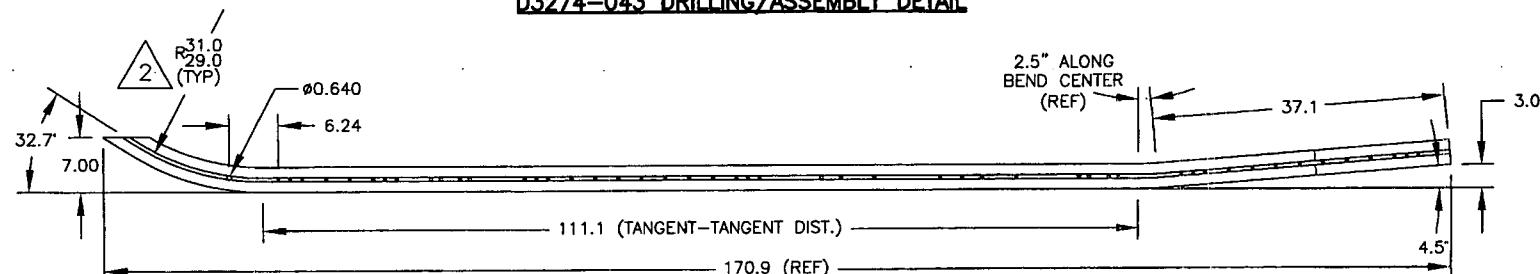
DESIGN	CP	DRAWN BY	PH	DART	DART AEROSPACE USA, INC. PORT HUDDLE, MA
CHECKED	#	APPROVED	#	DRAWING NO.	D3274
DATE	06.12.19	TITLE	SKIDTUBE ASSEMBLY	REV. D	SHEET 2 OF 4
SCALE				1:15	

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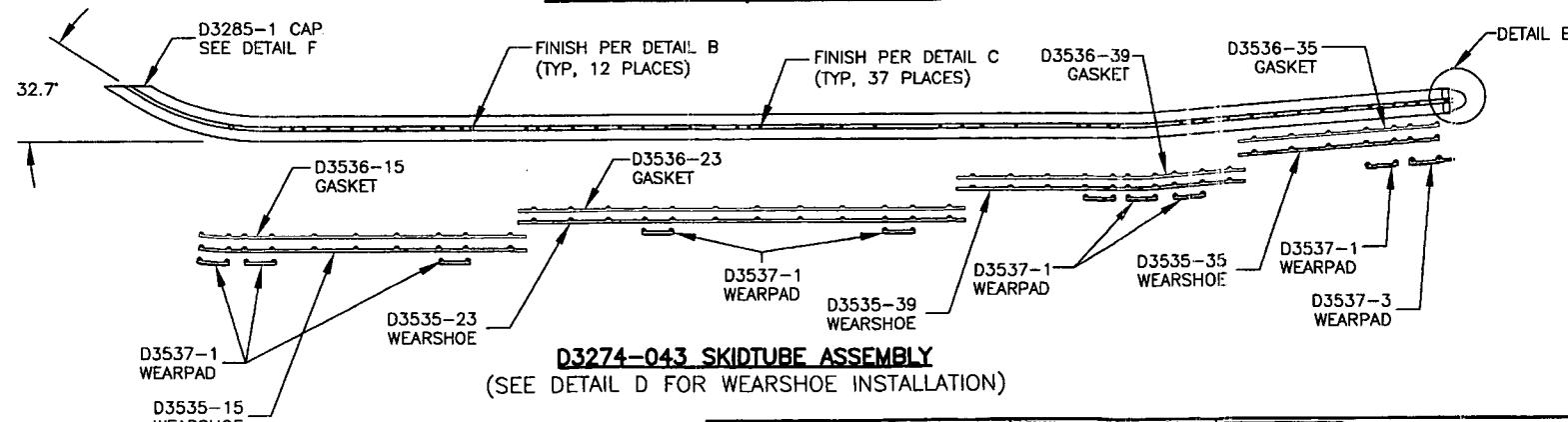
DEO ATTACHED



D3274-043 DRILLING/ASSEMBLY DETAIL



D3274-043 BEND/DRILLING DETAIL



D3274-043 SKIDTUBE ASSEMBLY
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

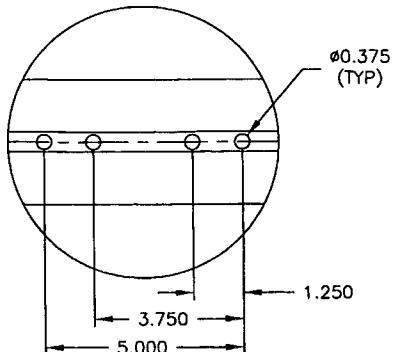
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07.02.12

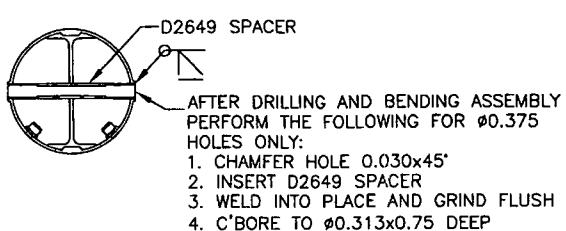
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CHECKED	APPROVED			DRAWING NO.	REV. D
				D3274	SHEET 3 OF 4
DATE			TITLE		SCALE
06.12.19			SKIDTUBE ASSEMBLY		1:15

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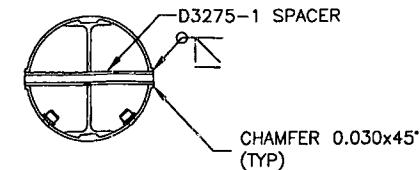
DETAIL A: DRILL DETAIL



DETAIL B
FOR Ø0.375 HOLES ONLY

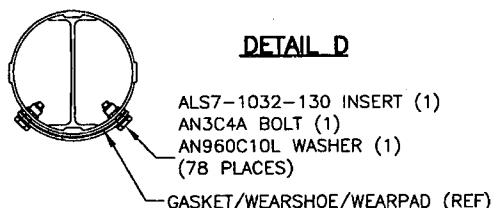


DETAIL C
FOR Ø0.313 HOLES ONLY



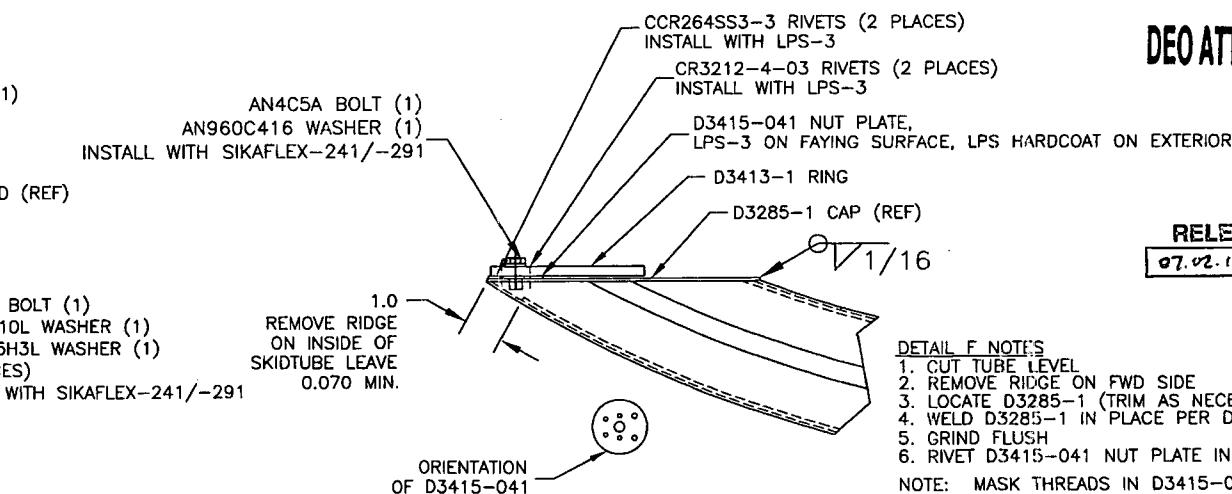
67220
cm

DETAIL D



AN4C5A BOLT (1)
AN960C416 WASHER (1)
INSTALL WITH SIKAFLEX-241/-291

DETAIL F: END FINISHING DETAIL



DET ATTACHED

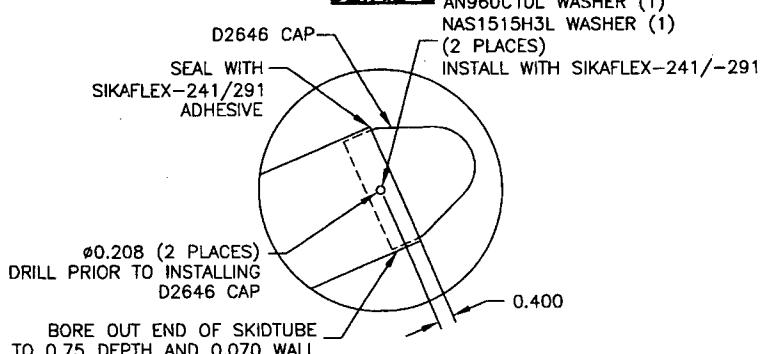
RELEASED

07.02.12

DETAIL F NOTES

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D3285-1 (TRIM AS NECESSARY)
4. WELD D3285-1 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D3415-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D3415-041 PRIOR TO FINISH



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DESIGN	DRAWN BY	DART	DART AEROSPACE USA, INC. PORT HUENEMER, MA
CP	PH		REV. D
CHECKED	APPROVED	D3274	SHEET 4 OF 4
DATE	TITLE	SKIDTUBE ASSEMBLY	SCALE 1:3
06.12.19			

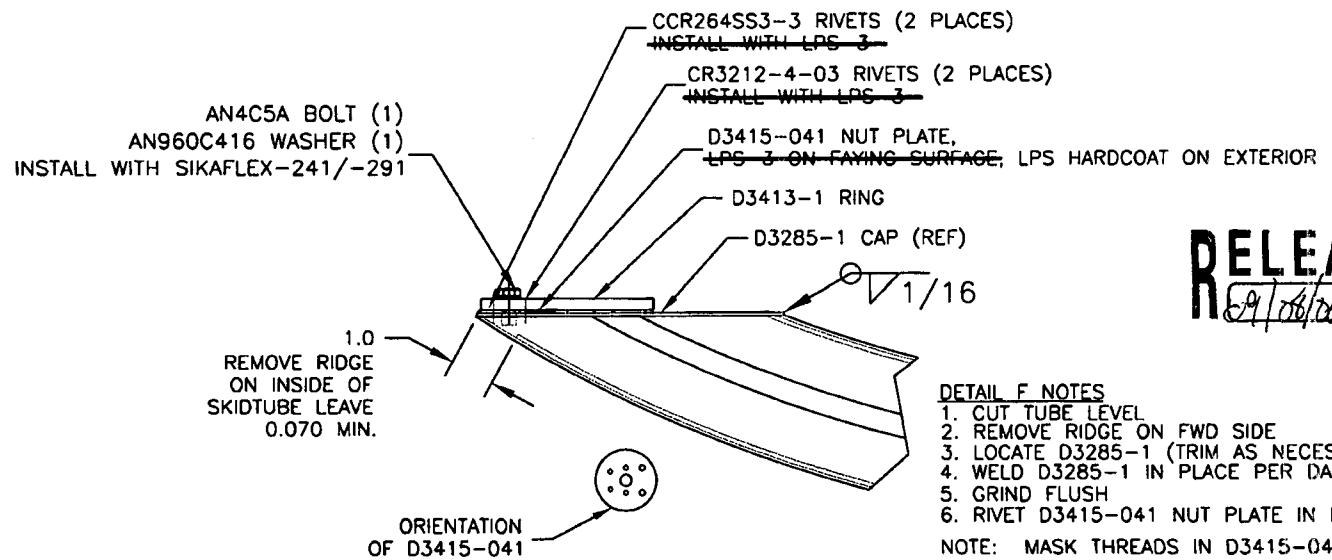
DRAWING NO. D3274	TITLE SKIDTUBE ASSEMBLY	REV. D	DART AEROSPACE USA, INC ENGINEERING ORDER	D.E.O. NO. D3274-D-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>GP</i>	CHECKED <i>AM</i>	MFG. APPR. <i>M</i>	APPROVED <i>MAP</i>	DE APPR. <i>MM</i>		
DATE 09.06.17	DATE 09.06.23	DATE 09/06/23	DATE 09/06/23	DATE 09.06.23	DATE 09.06.23	

LPS-3 IS NO LONGER USED DURING ASSEMBLY OF SKIDTUBE.

AMEND NOTE 8: "~~SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES 'LPS 3' AFTER FINISH AND INSTALLATION OF INSERTS.~~
~~COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES 'LPS PROCYON' AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF~~
~~POWDER COATING WITH MEK DEGREASER."~~

AMEND DETAIL F AS SHOWN:

DETAIL F: END FINISHING DETAIL

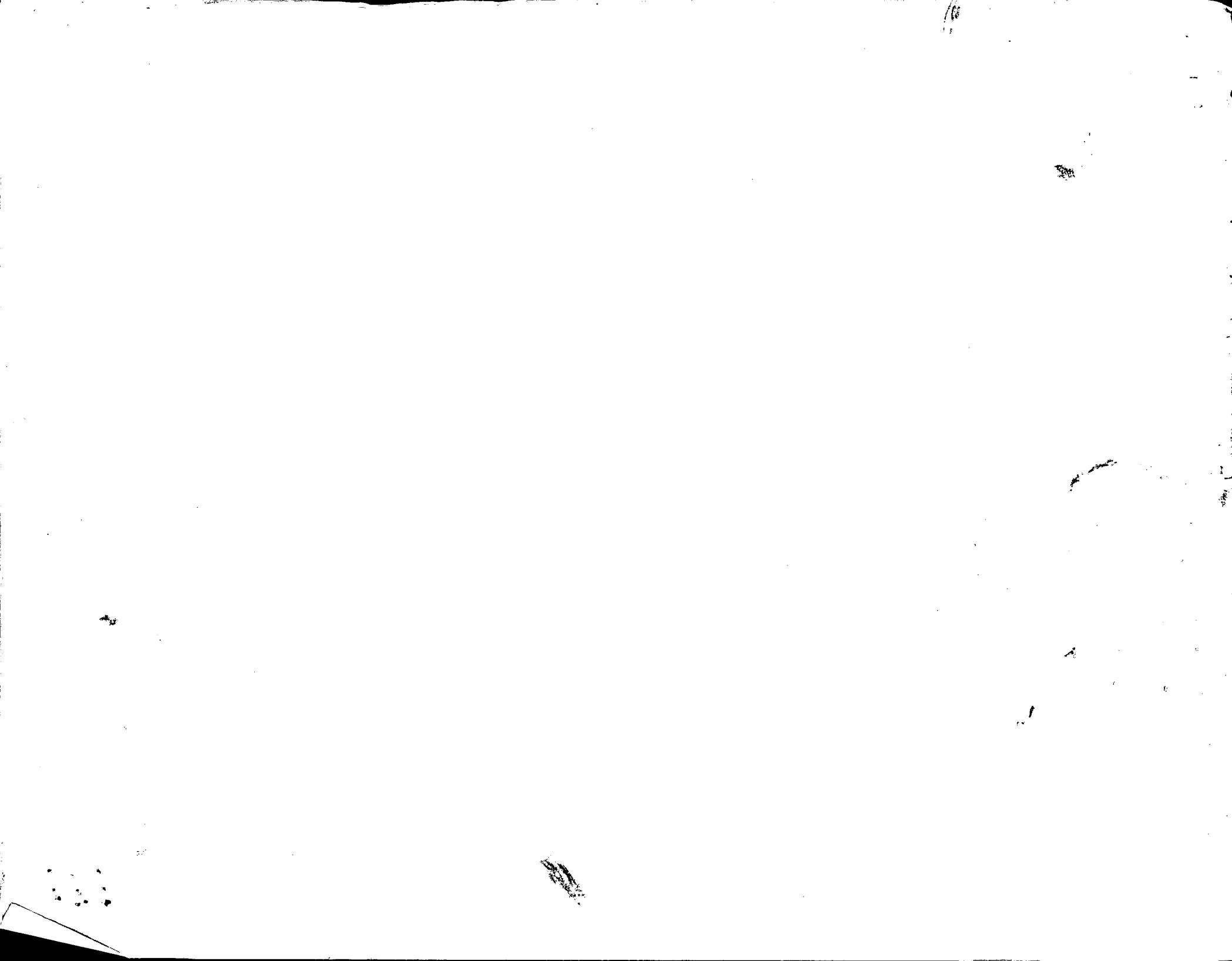


RELEASED
09/06/23 MM

DETAIL F NOTES

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D3285-1 (TRIM AS NECESSARY)
4. WELD D3285-1 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D3415-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D3415-041
PRIOR TO FINISH



NO. 241

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 622808
Part number: D906-642-541
Description: 206 skid
Welding Process: Tig[X] Mig[]
Base material: Aluminum
Current: AC[] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[] fail[]
Penetration: pass[X] fail[]

UNACCEPTABLE

Cracks: pass[] fail[]
Undercut: pass[X] fail[]
Pin holes: pass[] fail[]
Overlap (cold lap) pass[] fail[]
Porosity (surface): pass[] fail[]
Coloration: pass[] fail[]

Qualifier RJD Date of Test Coupon 10-09-30
Welder Barclay Elliott Date of Test Coupon 10-09-30

The above named individual is qualified in accordance with AWS D17.1.2001 to weld.